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1978

FINAL
ENVIRONMENTAL ASSESSMENT RECORD

NV-050-8-71

for

LAS VEGAS VALLEY PUBLIC LAND SALE

Location: See Attachment "A"
for the legal description of the subject public lands

Bureau of Land Management
Library
Bldg. 50, Denver Federal Center
Denver, CO 80225

Team Leader: Werner H. Sallani
Realty Specialist

Bureau of Land Management
Las Vegas District Office
Las Vegas, Nevada

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ATTACHMENT "A"

		Acres
T. 21 S., R. 60 E., M.D.M. Section 11,	Lot 11	5.00
	Lot 20	5.00
	Lot 50	5.00
	Lot 53	5.00
	Lot 110	5.00
T.21 S., R. 60 E., M.D.M. Section 12,	Lot 19	5.00
	Lot 73	5.00
	Lot 79	5.00
T. 21 S., R. 60 E., M.D.M. Section 13,	N½NE¼NW¼SW¼	5.00
	NE¼NW¼SE¼SW¼	2.50
	E½NE¼NE¼SW¼	5.00
	W½SW¼NE¼SW¼	5.00
T. 21 S., R. 60 E., M.D.M. Section 24,	SE¼SE¼NW¼	10.00
	S½SE¼	80.00
T. 21 S., R. 60 E., M.D.M. Section 25,	W½SW¼NE¼NE¼	5.00
	SE¼NW¼NE¼	10.00
	E½SW¼NW¼NE¼	5.00
	E½NE¼SW¼NE¼	5.00
	W½SW¼NE¼	20.00
	S½NE¼SE¼NE¼	5.00
	N½NE¼SE¼SE¼NE¼	1.25
	N½S½NE¼SE¼SE¼NE¼	.625
	SW¼SE¼NE¼	10.00
	E½SW¼NW¼NW¼	5.00
	W½SE¼NW¼NW¼	5.00
	W½NE¼SW¼NW¼	5.00
	NW¼SW¼NW¼	10.00
	E½SW¼SW¼NW¼	5.00
	SE¼SW¼NW¼	10.00
	E½NE¼NE¼SW¼	5.00
	E½NW¼NE¼SW¼	5.00
	S½NE¼SW¼	20.00
	E½NE¼NW¼SW¼	5.00
	W½W½NW¼SW¼	10.00
	W½SE¼NW¼SW¼	5.00
	E½SW¼SW¼SW¼	5.00
	E½SE¼SW¼SW¼	5.00
	W½E½SE¼SW¼	10.00

BUREAU OF LAND MANAGEMENT
Library
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Attachment "A" (continued)

Section 25,	(continued):	
	E½SW¼SE¼SW¼	5.00
	NW¼SE¼SW¼	10.00
	E½NE¼NE¼SE¼	5.00
	W½NW¼NE¼SE¼	5.00
	SE¼NE¼SE¼	10.00
	N½NW¼SE¼	20.00
	N½SW¼SE¼	20.00
	E½SW¼SW¼SE¼	5.00
	SE¼SW¼SE¼	10.00
	W½NE¼SE¼SE¼	5.00
	NW¼SE¼SE¼	10.00
T. 21 S., R. 60 E., M.D.M.		
Section 26,	E½SE¼SE¼NW¼	5.00
	NE¼NE¼SW¼	10.00
	W½NW¼NE¼SW¼	5.00
	W½NE¼NW¼SW¼	5.00
	E½W½NW¼SW¼	10.00
	SW¼SW¼SW¼	10.00
	E½SE¼SE¼SW¼	5.00
	W½SW¼NE¼SE¼	5.00
	E½SE¼NE¼SE¼	5.00
	E½SW¼NW¼SE¼	5.00
	W½SE¼NW¼SE¼	5.00
	W½NW¼SW¼SE¼	5.00
	NE¼SE¼SE¼	10.00
	E½NW¼SE¼SE¼	5.00
	W½SE¼SE¼SE¼	5.00
T. 21 S., R. 61 E., M.D.M.		
Section 19,	NE¼NE¼SW¼NW¼	2.50
	SW¼NE¼SW¼NW¼	2.50
	Lot 13	2.50
	Lot 14	1.09
	Lot 17	2.50
	Lot 18	1.10
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	E½NW¼SE¼SE¼	5.00
	E½SW¼SE¼SE¼	5.00
	SW¼SW¼SE¼SE¼	2.50
	S½NE¼NE¼SE¼	5.00
	N½SE¼NE¼SE¼	5.00
T. 21 S., R. 61 E., M.D.M.		
Section 20,	SE¼NW¼NW¼SW¼	2.50
	NE¼SW¼NW¼SW¼	2.50

Attachment "A" (continued)

T. 21 S., R. 61 E., M.D.M. Section 29,	SW¼NW¼SE¼NW¼	2.50
	SE¼NE¼SW¼NW¼	2.50
T.21 S., R. 61 E., M.D.M. Section 30,	W½NW¼NE¼NE¼	5.00
	NE¼SW¼NE¼NE¼	2.50
	NW¼SE¼NE¼NE¼	2.50
	SW¼SW¼NW¼NE¼	2.50
	SE¼NE¼SW¼NE¼	2.50
	SE¼NW¼SW¼NE¼	2.50
	S½SW¼SW¼NE¼	5.00
	NW¼NE¼SE¼NE¼	2.50
	S½NW¼SE¼NE¼	5.00
	E½SW¼SE¼NE¼	5.00
	SW¼SW¼SE¼NE¼	2.50
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	W½NW¼SE¼NW¼	5.00
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	N½SE¼SE¼NW¼	5.00
	SE¼SE¼SE¼NW¼	2.50
	SE¼NE¼NE¼SE¼	2.50
	SW¼NW¼NE¼SE¼	2.50
	E½SW¼NE¼SE¼	5.00
	SW¼SW¼NE¼SE¼	2.50
	W½SE¼NE¼SE¼	5.00
	NW¼NE¼NW¼SE¼	2.50
	S½NE¼NW¼SE¼	5.00
	NE¼NW¼NW¼SE¼	2.50
	SW¼NW¼NW¼SE¼	2.50
	S½NW¼SE¼	20.00
	NE¼NE¼SW¼SE¼	2.50
	S½NE¼SW¼SE¼	5.00
	W½SW¼SE¼	20.00
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	NW¼NW¼SE¼SE¼	2.50
	SE¼NW¼SE¼SE¼	2.50
	SW¼SE¼SE¼	20.00
	NW¼SE¼SE¼SE¼	2.50
	TOTAL	741.565

Table of Contents

Page No.

I. Introduction-- 1

II. Description of the Proposed Action and Alternatives-------- 2

III. Planning-- 2

- A. BLM Planning-- 2
- B. Clark County Planning-- 3

IV. Description of the Existing Environment-------------------- 3

- A. Non-Living Components-- 3
  - 1. Topography-- 3
  - 2. Geology-- 4
  - 3. Soils-- 4
  - 4. Water-- 7
  - 5. Minerals-- 7
  - 6. Climate-- 8
  - 7. Air Quality-- 8
- B. Living Components-- 8
  - 1. Vegetation-- 8
  - 2. Animals-- 8
  - 3. Ecological Interrelationships-------------------- 9
  - 4. Human Values-- 10

V. Analysis of the Proposed Action and Alternatives---------- 13

- A. Proposed Action-- 13
- B. Alternative #1-- 17
- C. Alternative #2-- 17

Page No.

D. Alternative #3-- 18

VI. Persons, Groups, and Governmental Agencies Consulted------- 18

VII. Intensity of Public Interest-------------------------------- 18

VIII. Participating Staff-- 18

IX. Summary--- 19

X. Signatures-- 19

Addendum--- 20

I. Introduction

The Bureau of Land Management has proposed to initiate a public land sale program in the Las Vegas Valley for the subject lands identified in Attachment "A", under the authority of the Federal Land Policy and Management Act of (90 Stat. 2743; 43 USC 1701, 1713) and 43 CFR 2710.

Location

The proposed sale area is bordered by Charleston Boulevard on the north, on the east by Interstate Highway 15, on the south by Russell Road, and on the west by Rainbow Boulevard.

The sale area was identified through a joint planning effort between the Clark County Planning Department, Clark County Regional Planning Commission and the Bureau of Land Management. The scattered tracts of public land are located on the outskirts of the city of Las Vegas and are proposed to be sold for the following reasons:

1. The proposed sale area is located in a rapidly expanding suburban and industrial area on the outskirts of the city of Las Vegas. Existing facilities such as schools, roads, powerlines, and telephone lines have been constructed in this area to accommodate suburban and industrial expansion.

2. The subject lands in this area consist of scattered tracts of public land and they cannot be managed effectively under existing BLM programs involving range, watershed, wildlife, recreation, lands, and minerals, due to incompatible land uses on adjoining private lands which are primarily used for suburban and industrial development.

   Random suburban and industrial development throughout the proposed sale area require a variety of services such as powerlines, telephone lines, water lines, and other facilities. Due to the segmented land pattern of private and public lands in the sale area, the Las Vegas District is continually receiving rights-of-way applications for these facilities. Processing these applications is not only expensive, but management is also limited, since random development does not permit these facilities to be channeled through designated corridors.

   Another land use problem associated with suburban and industrial development in this area is unauthorized dumping. With development of private lands, the subject lands have become convenient areas for illegal dumping. The Las Vegas District is presently confronted with a Clark County ordinance which requires the land owner to clean up his property to particular standards under penalty of law. Although the Regional BLM

Solicitor has advised the Las Vegas District that the ordinance is not applicable to public lands, nevertheless, the problem has not been solved, with irate private land owners protesting such conditions on adjoining public lands, and expecting the BLM to take necessary steps to remedy the situation.

3. The Las Vegas District has received no indication of interest from other Federal or local governmental agencies that the subject lands are needed for public purposes, or to enhance other public programs.

II. Description of the Proposed Action and Alternatives

A. Proposed Action

Offer the subject lands for sale by public auction.

B. Alternative #1

No action (retain in Federal ownership).

C. Alternative #2

Dispose of the subject lands by exchange and/or the Recreation and Public Purpose Act.

D. Alternative #3

Dispose of scattered public lands within the Las Vegas Valley that are located outside of the proposed sale area.

III. Planning

A. BLM Planning

Lands Decision No. 6 of the Stateline Planning Unit Management Framework Plan states: "Transfer of public lands to other ownership to provide for future expansion of the Las Vegas Valley will be accomplished consistent with the established schedule to promote orderly growth."

Future expansion areas have been identified in Step II of the Stateline Planning Unit Management Framework Plan, in order to project a timetable that would allow for the orderly disposal of public lands in the Las Vegas Valley to meet both public and private land use needs.

Lands Decision No. 5 of the Stateline Planning Unit Management Framework Plan (MFP) states: "Public lands required for land exchanges within National Forests will be made available consistent with the schedule established in the Management Framework Plan available for review at the BLM Las Vegas Office."

This decision was based on the rationale that land disposals should be based on a need to place land in private ownership. This should depend on the population projections, as depicted on the Step II Stateline Planning Unit MFP overlay showing land disposal time frames.

The proposed public land sale is in conformance with these land use decisions, and would not conflict with other decisions of the Stateline Planning Unit MFP affecting wildlife, range, minerals, recreation, forestry, watershed, and wild horses and burros.

B. Clark County Planning

Clark County Planning and Zoning has shown an indication of interest to have particular tracts of public land within the proposed sale area reserved for public purposes such as school sites, park sites, a state museum, and a police substation. The County has requested that the Federal government retain these tracts, until they are needed for the indicated public purposes. Disposal of these tracts to Clark County would be accomplished under the Recreation and Public Purpose Act.

Refer to the land status map in the addendum section of the Environmental Analysis for a summary of Clark County planning proposals.

IV. Description of the Existing Environment

A. Non-Living Components

1. Topography

The Las Vegas Valley is relatively flat and is surrounded by a number of mountain ranges. They are the Pintwater, Desert, Sheep and Las Vegas Mountain Ranges on the north, the Frenchman Mountain Range on the east, the River and the McCullough Mountain Ranges on the south, and the Spring Mountain Range on the west. Elevation of the area ranges from 2,200 feet in the Las Vegas Valley to 11,910 feet on Mount Charleston in the Spring Mountain Range. The area is drained by the Las Vegas Wash which empties into Lake Mead to the east.

The subject lands within the proposed sale area are situated in the Las Vegas Valley at an average elevation of approximately 2,300 feet, and slopes northeasterly.

2. Geology

The sedimentary formations in the surrounding mountain ranges consist mainly of limestone, and mixtures of sandstone, shale, dolomite, gypsum, and in places interbedded quartzite.

The alluvial mantle in the Las Vegas Valley is composed of many coalescing fans dissected by numerous drainage channels. In its upper reaches, at an elevation of approximately 4,500 feet, the alluvial mantle is made up of poorly sorted gravelly, cobbly, and stony sand deposits, grading to finer materials as it nears the valley floor. The younger alluvial deposits have been transported predominantly by water and deposited on gently sloping alluvial fans and flood plains. Deposition of alluvium is continuing today. In places intermittent streams are cutting into the flood plains and forming alluvial terraces.

3. Soils

Soils information was obtained from "Soil Survey Las Vegas and Eldorado Valleys Area Nevada". The following soils are present on the subject lands and include the McCarran, Cave, Jean, and Goodsprings series. Badlands falls under the category, "Miscellaneous Land Type". This designation is part of the soil survey and not part of the soil classification system.

McCarran Series

The McCarran series consists of moderately well-drained, moderately coarse-textured soils that formed in gypsiferous and calcareous lake sediments. Gypsum occurs in all horizons, but varies in amount and distribution, and is usually concentrated in the subsoil and substratum.

McCarran fine sandy loam occurs extensively south of the city of Las Vegas. Normally the depth to the substratum ranges from 10 to 24 inches, but in places is less than 6 inches. In some areas there are outcrops of crusty, crystalline gypsum.

Natural drainage is moderately good. Runoff is very slow. Permeability is moderate as far down as the substratum and then slow through this layer. The water-holding capacity and the inherent fertility are moderate. The erosion hazard is moderate.

This soil is not used for farm crops. Its potential for production under cultivation and irrigation is very poor because of the large quantities of gypsum. It has poor

potential for urban uses and fair potential for industrial uses, but the sulfate hazard to concrete is severe and structures must be designed accordingly. This soil has severe limitation as foundation-bearing material. It is unsuitable as a source for sand and gravel.

Cave Series

For the Cave series the soil survey states: "These soils consist of well-drained, moderately textured soils that have an indurated lime hard pan. These soils formed in alluvium are derived mainly from limestone but partly from quartzite, rhyolite, and sandstone. Cave soils are shallow or very shallow and calcareous. These soils are not used for farming. They are unsuitable for most crops.

Cave gravelly fine sandy loam, 0 to 4 percent slopes is extensive along the western side of Las Vegas Valley. It is covered with a well developed desert pavement. Most of the gravel has a burnished desert varnish on its exposed side. There are many intermittent drainage channels, ranging from a few inches to five feet in depth.

Natural drainage is good. Runoff is medium. Permeability is moderately rapid as far down as the pan but very slow through it. The water holding capacity and the inherent fertility are very low. The erosion hazard is moderate.

This soil is not suitable for cultivation and irrigation because of its shallow root zone and very low water holding capacity. The surface soil and subsoil have moderate limitations as foundation-bearing material, but the substratum has only slight limitations. This soil has fair value as subgrade material. The shrink-swell potential is low. The sulfate hazard to concrete is low.

Cave loamy fine sand, shallow, 0 to 4 percent slopes, lacks the gravel desert pavement. Consequently, it is subject to moderate wind erosion if the vegetation is disturbed. The surface soil has moderate limitations as foundation bearing material, fair value as subgrade material, and poor value as subbase material.

Cave loamy fine sand, very shallow, 0 to 4 percent slopes is similar to Cave gravelly fine sandy loam, 0 to 4 percent slopes, but is shallower and coarser textured. For the most part, this soil can be used and managed in the same way as Cave gravelly fine sandy loam, 0 to 4 percent slopes. It needs to be protected against wind erosion. Tree plantings are advisable in urban areas and the roots should be planted below the pan.

Goodsprings Series

The Goodsprings series consists of well-drained, gravelly, moderately coarse-textured soils that formed in alluvium derived from limestone, sandstone, and some quartzite. These soils are shallow, gravelly and calcareous.

Goodsprings gravelly loamy fine sand, 2 to 4 percent slopes has a lime-cemented subsoil ranging from 6 to 20 inches, and the degree of cementation ranges from weak to strong. The content of gravel is greatest on the higher and more sloping fans.

Natural drainage is good, and runoff is slow. Permeability is slow to very slow in the subsoil. The water holding capacity and the fertility are very low. The root zone is shallow. The erosion hazard is moderate.

This soil is poorly suited for farm crops, and none of it is farmed. It is suitable for many engineering purposes and is used as a source of gravel and to a limited extent for homesites. The substratum has only slight limitations as foundation-bearing material and is a fair or good source of sand and gravel. The sulfate hazard to concrete is moderate.

Jean Series

The Jean series consists of coarse-textured soils that formed in alluvium derived from limestone, sandstone, and quartzite. Jean soils are calcareous and are moderately deep over gravel.

Natural drainage is excessive. Runoff is very slow except during torrential rains. Permeability is rapid as far down as the gravel and very rapid below that depth.

If irrigation water were made available, this soil would be fairly well suited to crops. This soil has good potential for both urban and industrial development. It has slight to moderate limitations as foundation-bearing material. Generally, it is a good source of gravel. There is generally no shrink-swell potential. The sulfate hazard to concrete is slight.

Badland

Badland consists of areas of rough complex topography that has resulted from local geologic faulting, exposure of the Muddy Creek formation, and erosion of lake sediments that were deposited later.

The soil material consists of multicolored, calcareous, gypsiferous, stratified clay and silt and thin strata of sand. It ranges from very shallow to moderately deep. Natural drainage is good. Runoff is very rapid, and permeability is slow. The water-holding capacity and the natural fertility are very low. The erosion hazard is very severe.

Badland is not suited for cultivated crops. It is used to some extent for homesites but is not suitable for large-scale urban and industrial development. It has moderate to severe limitations as foundation-bearing material and is unsuitable as subgrade material. The shrink-swell potential is moderate to high. The sulfate hazard to concrete is severe.

4. Water

There are no perennial streams in the Las Vegas Valley. Water is supplied to Las Vegas from Lake Mead and wells.

There is some information available about ground water. In 1954 a well was developed in the NW¼SW¼ Section 24, T. 21 S., R.60 E., M.D.M. Standing water was measured at 130 feet.

There is a record of two wells in Section 19, T. 21 S., R. 61 E., M.D.M. In 1966 in the SW¼NW¼, standing water was measured at 110 feet. The other well was drilled in 1972 in the NW¼SW¼. Standing water for this well was measured at 180 feet.

Information about these wells was obtained from the Nevada Division of Water Resources. Data about the quantity and quality of water was not available.

State regulations on the use of ground water currently restrict the extension of irrigation into the Las Vegas Valley. Water for domestic use can be obtained from the Las Vegas Valley Water District.

5. Minerals

According to a mineral report received by this office from the U.S. Geological Survey, the lands are:

- -- prospectively valuable for oil and gas
- -- potentially valuable for sodium and potassium

"Prospectively valuable for oil and gas" only means that 1,000 feet of sediments are present.

Refer to the minerals report prepared by Peter G.D. Ertman, Geologist, for a summary of existing mining claims. A copy of this report is in the addendum section of the Environmental Analysis.

6. Climate

Las Vegas Valley's climate is characterized by low humidity, abundant sunshine, mild winters, and hot, dry summers. The maximum recorded temperature is 118°F. and the minimum is 9°F. Usually the first killing frost occurs in November, and the last is in March. The frost-free period is approximately 241 days. Extremes of cold are rare.

The average annual precipitation is 4.6 inches. Precipitation occurs every month of the year, on the average, but the wettest months see only 0.5 to 0.6 inches of water. January and February, and July and August, are the wettest months. In the fall, winter, and spring, the rainfall normally is gentle. Summer storms sometimes have intense rates of precipitation.

7. Air Quality

The prevailing winds are from the north and northwest in the winter, and from the south in the spring and summer. Winds of high velocity occur frequently and at all times of the year, but are most common in the spring. These high velocity winds carry large quantities of dust and sand.

Temperature inversions occur in the Las Vegas Valley at any time of the year. The inversions are quite noticeable over the intensively utilized areas. There is reduced visibility and the air is noticeably polluted. Most of this pollution is generated by vehicles.

B. Living Components

1. Vegetation

The major vegetative species on the subject lands are bursage, globemallow, shadscale, winterfat, Brigham Tea, mesquite, creosote, Indian ricegrass, Galletta grass, three awn grass, six-weeks fescue grass, and desert trumpet grass.

There are no known threatened and/or endangered plant species on the subject lands.

2. Animals

a. Mammals

The subject lands are not suitable for big game

habitat because of the absence of water, sparse forage and dispersed cover. Some small mammals, mainly rodents, can be found on the subject lands. These animals have nocturnal habits and are not readily noticed. These resident mammals are kangaroo rats and mice.

Other animals using the area as part of a territory are the blacktailed jackrabbit, cottontail rabbit, and kit fox. Bats are sometimes seen at dusk in this locality.

There are no known threatened and/or endangered mammals on the subject lands.

b. Birds

Most of the birds seen in the Las Vegas Valley are migratory. Resident birds seen around the subject lands include the say phoebe, horned lark, raven, pipit, shrike, sparrow, junco, and the roadrunner.

There are no known threatened and/or endangered bird species on the subject lands.

c. Reptiles

Lizards are the most numerous of the reptiles found on the subject lands and some of them are residents.

Snakes that are likely to be seen in the vicinity are the red racer, king snake, and sidewinder.

The desert tortoise is infrequently seen in this area. This reptile is classified as "rare" by the State of Nevada.

There are no known threatened and/or endangered reptile species on the subject lands.

d. Insects

No identification was made of the numerous species of insects likely to be found on the subject lands.

There are no known threatened and/or endangered insect species on the subject lands.

3. Ecological Interrelationships

As in any other ecosystem, there is an energy pyramid in the desert environment. Plants are the primary food

producers, using sunlight, water, soil minerals, and carbon dioxide to produce food. The plants are eaten by the herbivorous animals such as rodents, some birds, insects and some reptiles. These are in turn eaten by carnivores such as snakes, lizards, and birds of prey. Omnivorous animals eat both plant and animal material. Scavengers clean up whatever the other animals have overlooked and bacteria and fungi decompose the rest. Plants use these decomposition products to produce new food, thereby closing the system with very little material being lost.

Man has greatly changed this natural ecosystem by the construction of railroads, highways, airports, powerlines, and homesites. Construction of these facilities have destroyed native plant communities, disrupted food chains and lowered the water table. Some of these natural changes have been replaced by scientific and technological advancement to maintain the system in balance. Native plants have been replaced by introduced and ornamental grass and shrub species. Additional amounts of water have been pumped from Lake Mead to meet the needs of an expanding population and industry. Sometimes, technology cannot balance the external and internal forces that maintain a dynamic environment. Continuous pumping of the aquifers in the Las Vegas Valley has led to subsidence. This geological phenomena results in large cracks in the soil mantle and causes structural damage to buildings, roads, etc.

4. Human Values

a. Landscape Character

The flat to gently rolling terrain of the valley set against the background of the surrounding mountains reflects an unusual panorama. The skyline of the city of Las Vegas, homesites, roads, and powerlines seem to intrude in this valley setting. However, the visual contrasts of the Las Vegas Valley are subjective and some people may find the Las Vegas skyline and developments interesting, since they add another dimension to the natural valley setting.

b. Cultural Values

A number of important cultural resource sites have been uncovered in the Las Vegas Valley. The Tule Spring site, an early man site, was excavated in 1968. The excavated material from this site was carbon sampled and a date of 10,000± 200 years B.P. (before present) was obtained through this method. The Berger site, a Southern Piute site, was another important archaeological discovery in the Las Vegas Valley. The Duck Creek and Eggleton sites are a

series of sites or complexes which are descriptive of the Southern Piutes and Anasazi civilizations.

An intensive archaeological inventory was conducted by BLM personnel of the subject lands. The findings were negative and are summarized in a Cultural Resources Report No. 5-401(N) which is on file in the Las Vegas District Office.

c. Wilderness

A wilderness inventory has not yet been conducted in the Las Vegas Valley. However, it is believed that there are no wilderness values on the subject lands. The area is part of the greater Las Vegas metropolitan area and intrusions such as homesites, roads, powerlines, telephone lines, and other developments have completely altered the natural landscape.

Over 98% of the road network in the Las Vegas Valley is regularly maintained by Clark County and the Nevada State Highway Department. This description of the road network in the Las Vegas Valley meets the road definition of Instruction Memorandum No. NV-78-1.

d. Socio/Economic Considerations

Clark County is characterized by rapid population increases associated with the explosive growth of the hotel-casino industry. The population of the county increased 115% between 1960 and 1970 from 127,016 to 273,288. The estimated population in 1977 was 370,457 (Bureau of Business and Economic Research (BBER), University of Nevada, Reno, 1978). Additional population growth is expected through the year 2000. The projected populations in 1980, 1990, and 2000 are 416,713, 534,905, and 624,165 respectively (BBER, 1978). This growth is expected to continue to be concentrated in the Las Vegas Valley which contains about 97% of the population of Clark County.

The economic base[1/] of Clark County is dominated by the resort industry which accounts for 74% of basic employment (Center for Business and Economic Research, UNLV, 1975). Other basic activities include the

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[1/] A region's economic basic consists of those industries that bring in dollars from outside the region. A region's growth is primarily determined by such industries.

military bases at Nellis and the Nevada Test Site, and manufacturing at Henderson. A growing new basic industry is warehousing; however, the resort industry will continue to be the dominant source of economic growth.

Although economic growth has been the primary reason for population increases, the climate of Clark County has attracted a growing number of retired persons to the area.

Urban and suburban development has occurred over much of the Las Vegas Valley. Development of the area has not been uniform. There are many vacant areas located adjacent to high density use areas, and many spot developments situated away from the metropolitan area. This type of development generally leads to high per-unit costs for county services which usually places significant strains on county budgets; however, Clark County is in good financial shape. In 1977 the county had an operating surplus of $1,797,056, 2.21% of total receipts ($81,327,733). (Clark County Financial Report, June 30, 1977).

According to the Clark County Regional Comprehensive Plan, "There is adequate land in private ownership in the Las Vegas Valley to meet urbanization needs. The private ownership of vacant developable land in the Las Vegas Valley is over 300 square miles or 3.5 times the currently urbanized land. In other words, 3.5 additional Las Vegas Metropolitan areas could be built on the currently vacant developable private lands within a ten-mile radius of downtown."

e. Land Uses

Private lands within the proposed sale area are primarily used for homesites, light industrial parks, ORV use, wildlife habitat, and for rights-of-way involving powerlines, telephone lines, water lines, and other facilities.

The public lands within the sale area are primarily used for rights-of-way, wildlife habitat, and ORV use.

f. Flood Hazards

The areas that fall within the 100-year flood zone are Flamingo Wash, Tropicana Wash, and a tributary of Tropicana Wash. These areas have been identified

on an overlay in the addendum section of the Environmental Analysis. Outside of the 100-year flood plain the depth of flooding is likely to be less than one foot and development can take place on these lands.

The flood channels described in the previous paragraph have generally been unaltered by man. However, in the southwest quarter of Section 17, T. 21 S., R. 61 E., M.D.M. and the northeast quarter of Section 30, T. 21 S., R. 61 E., M.D.M., the Union Pacific Railroad forms a dike across these channels and will back up water in these areas.

V. Analysis of the Proposed Action and Alternatives

A. Proposed Action

1. Environmental Impacts

a. Anticipated Impacts

The following environmental impacts are anticipated if the subject lands are patented and are developed for residential and industrial purposes:

1) Topography - The land would be shaped or leveled to accommodate residential and industrial buildings.

2) Soil - Construction of residential and industrial buildings coupled with associated facilities would have the following effects:

   a) The biotic components of the soil such as roots and mites would be completely destroyed.

   b) Soil horizon development would be altered by earthmoving equipment in shaping the landscape and would also be affected in the construction of powerlines, sewer lines, and other facilities.

3) Water Pollution - After development there would be some runoff from the paved surfaces. This runoff would carry residue of various products and some of it would reach the ground water.

4) Minerals - The proposed sales area is zoned against mining and would not be affected by the proposed action.

5) Air Quality - Construction activities such as earth shaping operations would increase the levels of particulate matter in the air somewhat. Once construction is completed, air quality standards in this area would not be appreciably affected by the proposed action.

6) Noise - After development, the noise level is not expected to exceed that of other light industrial and/or residential areas.

7) Vegetation - Native plants would be replaced by introduced species.

8) Animals - The existing habitat for wildlife would be drastically altered by construction and future human habitation and therefore, animals that cannot adapt to the new habitat would leave, or no longer come to the subject lands.

9) Landscape Character - After development, the subject lands would no longer appear to be part of the desert landscape.

10) Social Economics - Sale of the subject lands would result in a net increase of approximately $113,000[1] in Clark County ad valorem taxes, this represents about 0.4% of the total county ad valorem tax revenue in 1977 ($27,959,501).

The State of Nevada would receive 5% of the revenue generated from the sales, the remaining 95% would go to the U.S. Treasury.

Sale of the subject lands is not expected to attract additional population or industry to the Las Vegas Valley because there already exists an ample amount of private developable land. In other words, the amount of private developable land is not a constraining factor. It is expected that development of residential and light manufacturing areas[2] will occur on the subject lands; however, if the subject lands would not have been available, such development would have occurred on other lands in the Las Vegas Valley.

[1] Calculated from data provided by Clark County Assessors Office for 1978. Actual taxes would be dependent on assessed value at the time of sale.

[2] It is estimated that of the 767.19 total acres, 212.19 would be zoned for light manufacturing, 230.0 acres would be zoned for 3 to 6 residential units per acre, and 325.0 acres would be zoned for 0.5 to 2 units per acre. Estimates calculated from the "General Plan for Unincorporated Portions of the Las Vegas Valley" Clark County Planning Commission, 1974.

The subject lands could accommodate a population of 5,846 people and provide 212.19 acres for light manufacturing.[1] This development would be expected to require significant amounts of Clark County services such as roads, fire protection, police, and other services such as power, water, and waste disposal. However, since such increased in the demands for services are expected regardless of whether the subject lands are sold, they are not an impact of the sale.

Sale of the subject lands to private interests would provide for more intensive development of the impact area. This should result in lower per unit costs for providing services to the area. On a county-wide basis, the overall effect would be very slight.

It is expected that sale of the subject lands would have little or no effect on the market price of land in the Las Vegas Valley because they account for less than 0.4% of the vacant developable land within a ten-mile radius of downtown Las Vegas.

11) Land Use Suitability and Compatibility - Limitations affecting development can be overcome with technology. For example, the sulfate hazard to concrete can be moderated by using sulfate resistant concrete and providing drainage. Septic tank limitations found in the Cave and the McCarran soil series may not be a factor if a central disposal system is used.

The adjoining lands would receive some impacts during the development phase of the subject lands which would primarily consist of increased levels of dust and noise.

12) Flood Hazard - Under Executive Order 11296 the BLM is responsible for evaluating flood hazard in connection with disposal of public lands in order to minimize future Federal expenditures for flood protection and flood disaster relief.

1/ 230.0 acres x 6 u/a = (1380 units) + 325.0 acres x 2 u/a (650.0 units) = 2030 units (see 2/ previous page) x 2.88 persons per unit (Clark County Regional Comprehensive Plan) = 5846. 212.19 acres light manufacturing (see 2/, previous page).

The Soil Conservation Service, U.S. Department of Agriculture, is preparing a report, "Flood Hazard Evaluation of the Las Vegas Valley", which is due to be published in September of 1978. Data from this report has been utilized in evaluating flood-prone areas on the subject lands.

The subject lands identified in the addendum section of the Environmental Analysis are located in a 100-year flood plain and development would be hindered in these areas. Also, the 100-year flood channels are depicted on the area map in the addendum section of the EAR.

b. Possible Mitigating or Enhancing Measures

1) Clark County zoning has the control over development and use of the subject lands if they become privately owned. This control would be in the direction of what local government considered to be in the best interest of the people.

2) Clark County Flood Control Division requires a plot and grading plan to be submitted with all building permit applications in order to mitigate flood hazards. The sale of these lands will be subject to this requirement and all other applicable Clark County regulations.

c. Recommendations for Mitigation or Enhancement

1) If the lands become privately owned, control over development and use would be with the Clark County Planning Commission. Mitigation or enhancement would be the responsibility of the Planning Commission and the developers.

2) Clark County Flood Control Division requires a plot and grading plan to be submitted with all building permit applications in order to mitigate flood hazards. The sale of these lands will be subject to this requirement and all other applicable Clark County regulations.

d. Residual Impacts

If the subject lands are transferred into private ownership, then land uses would become similar to other private lands in the area and such use would be constrained by Clark County zoning laws.

2. Relationship Between Short-Term Use and Long-Term Productivity

Short-term use refers to the development phase of the subject lands for industrial and suburban purposes. The development phase would completely change the biotic and physical characteristics and land uses of the subject lands. With proper planning and zoning, the area can be fully developed to sustain industrial and suburban uses indefinitely.

3. Irreversible and Irretrievable Commitments

The subject lands and its resources such as wildlife and open space would be permanently lost to the general public through this disposal action.

B. Alternative #1

The subject lands and the resources on these lands would not be lost to the general public if they were retained in Federal ownership. However, such action would not contribute to improved management of the subject lands, since land uses on adjoining private lands are geared to industrial and suburban development, and are incompatible with BLM management programs involving range, forestry, wildlife, recreation, lands, and minerals.

Industrial and suburban expansion has also caused other management difficulties, such as unauthorized dumping and the continual processing of rights-of-way applications to meet utility expansion needs of this suburban and industrial area.

Incompatible land uses between public and private lands in the area are a liability to BLM management programs and therefore, the subject lands could be used more effectively if they were transferred into private ownership.

C. Alternative #2

The subject lands could be disposed of through exchange and/or the Recreation and Public Purpose Act. However, the Bureau of Land Management has already reserved lands, as shown on the

land status map, indications of interest from other Federal agencies, and/or local governmental units. The remaining subject lands are not needed to enhance Federal or local governmental programs. Also, the Bureau's planning system did not indicate that the subject lands were needed for exchange, or public purposes. Therefore, the subject lands are not currently needed for exchange and/or the Recreation and Public Purpose Act.

D. Alternative #3

The Bureau of Land Management would not consider selling public lands outside of the proposed sale area at this time, since such action would conflict with Clark County and BLM planning in the Las Vegas Valley. Specifically, the Clark County Planning and Zoning Commission is concerned that public lands are first blocked up within the Las Vegas metropolitan area, in order to facilitate more effective land use planning. One of the Bureau's objectives is to aid local governmental units by making public lands available for suburban and industrial expansion consistent with local needs and land use planning.

VI. Persons, Groups, and Governmental Agencies Consulted

Paul Cleary, Soil Conservation Service, Reno, Nevada
Clark County Planning and Zoning Commission, Las Vegas, Nevada
Clark County Regional Planning, Las Vegas, Nevada

VII. Intensity of Public Interest

The Las Vegas District has received numerous inquiries in the past year as to the possibility of purchasing public land in the Las Vegas Valley. It is expected that interest in the proposed public land sale would be especially high, since the subject lands are located in an area near the city of Las Vegas where industrial and suburban development is progressing at a rapid pace. Other factors which are expected to contribute to this interest is the high cost of private lands in the Las Vegas Valley and the withholding of these lands from the market for speculative purposes.

VIII. Participating Staff

Frank E. Bingham, Chief, Division of Resource Management
Bruce E. Flinn, Environmental Coordinator
Jeff O. Holdren, Stateline-Esmeralda Resource Area Manager
James P. Dunn, Wilderness Specialist

Kenneth Detweiler, Wildlife Specialist
Gordon L. Cheniae, District Realty Specialist
Peter G. D. Ertman, Geologist, SERA
John Trimmer, Civil Engineer
Paul Hardy, Soil Scientist
David Loomis, Economist
Edward T. Ciliberti, Public Information Specialist

IX. Summary

The proposed sale area is located in a suburban and industrial expansion area. The scattered tracts of public land in this area cannot be managed effectively with BLM programs, due to incompatible land uses on adjoining private lands which are primarily used for suburban and industrial development. Land use problems associated with development on private lands are unauthorized dumping, and the continual processing of rights-of-way applications to meet expanding utility needs.

The subject lands could be utilized more effectively if they were transferred into private ownership. Such disposal action would result in similar land uses throughout the proposed sale area and allow for more efficient land use planning. Zoning restrictions would mitigate the environmental impacts of development, and disposal of the subject lands would not conflict with local governmental or BLM programs.

X. Signatures

August 8, 1978 — Werner H. Sallani
Date — Werner H. Sallani, Realty Specialist

Recommended for Approval by:

Aug 9, 1978 — Bruce E. Flinn
Date — Bruce E. Flinn, Environmental Coordinator

8/8/78
Date — Frank E. Bingham
Chief, Division of Resource Management

8/8/78
Date — Jeff O. Holdren, Area Manager

Approved by:

8/9/78
Date — John S. Boyles, District Manager

Addendum

1. Area Map
2. Land Status
3. Mining Claim Narrative
4. Flood Hazard Areas (100-Year Flood Zone)

Mining Claim Narrative
for Las Vegas Public Land Sale

The sale area is located in a portion of Las Vegas that has led a controversial history in the location of mining claims. Ten mining claims apparently conflict with the sale area. The names, location, status, appeal status, and dates are summarized in the accompanying table. All the claims have been located before 1955 for sand and gravel. Due to a change in the law, after 1955, sand and gravel was not locatable under the General Mining Law of 1872. Therefore, once the claims have been cleared and no further appeal exists, the claims cannot be relocated. No other valuable minerals are known to exist in the sale area. Ergo, once cleared, the land can be suitable for sale. The remainder of this report will address itself to that idea.

In a memo dated May 10, 1978, this office requested from the Nevada State BLM Office a search of the official files to ascertain the status and relevent actions of the ten claims in the sale area. Courthouse work was conducted after the above date to independently verify proof of labor affidavits, etc. This search was conducted at the Clark County Recorder's Office. Proof of labor affidavits have been filed through 1978 for all claims.

The State Office answered our memo, May 30, 1978. They pointed out that the Dredge claims have been filed under FLPMA. On the surface, therefore, it would seem that the Dredge claims are active and the land unsuitable for sale. By reference to the attached table, however, one can see that only two claims' status have not been decided; those being the Dredge 51 and Gravel Pit #9. These two claims are in conflict with two parcels of land. It is recommended that the two following parcels be deleted from the sale area:

T. 21 S., R. 60 E., M.D.M., Section 11, SW¼SW¼
T. 21 S., R. 60 E., M.D.M., Section 24, W½NW¼NE¼NW¼

It is conceivable that in the future, should the government be successful in its contests, these lands will become available for sale. At this date, however, they are not.

Again, by reference to the table, the Dredge 63, 64, 66 claims were appealed to the Supreme Court which denied certiorari and a final judgment by the Ninth District Court entered declaring the claims null and void.

The Dredge 46-50 claims on 05/23/66 in a decision by the Ninth District Court were declared null and void. Since this is not the highest level of appeal, it is conceivable that some day the locator of the claims

could appeal the decision. No statute of limitations apply. According to 43 CFR 2710.5(e) and 43 CFR 2710.8(c), the governments contends that the Ninth Circuit Court has upheld the lack of mineral values on these claims. At this time, therefore, the lands are suitable for disposal.

8/14/78
Date

for Peter G. D. Ertman, Geologist

MINING CLAIM SUMMARY

Name	Location	Status	Appeal Level Reached	Date
	(All T. 21 S., R. 60 E.)			
Dredge 46	NW¼ Section 12	Null & Void	Ninth Circuit Court	05/23/66
Dredge 47	SW¼ Section 12	do.	do.	do.
Dredge 48	NE¼ Section 11	do.	do.	do.
Dredge 49	NW¼ Section 11	do.	do.	do.
Dredge 50	SE¼ Section 11	do.	do.	do.
Dredge 51	SW¼ Section 11	Pending	Interior Administrative Hearing	04/28/78
Dredge 63	NE¼ Section 13	Null & Void	Supreme Court	03/21/69
Dredge 64	NW¼ Section 13	do.	do.	do.
Dredge 66	SW¼ Section 13	do.	do.	do.
Gravel Pit 9	N½N½ Section 24	Pending	Interior Board of Land Appeals	01/18/78

FLOOD HAZARD AREAS
(100-Year Flood Zone)

	Acres
T. 21 S., R. 60 E., M.D.M.	
Section 24:	
S½SE¼	80.00
Section 25:	
S½NE¼SE¼NE¼	5.00
N½E½SE¼SE¼NE¼	2.50
SW¼SE¼NE¼	10.00
E½SW¼SW¼NE¼	5.00
NW¼NW¼SE¼	10.00
E½NE¼NE¼SW¼	5.00
E½NW¼NE¼SW¼	5.00
E½NE¼NW¼SW¼	5.00
W½SW¼NW¼SW¼	5.00
SW¼NE¼SW¼	10.00
Section 26:	
E½SE¼NE¼SE¼	5.00
W½SW¼NE¼SW¼	5.00
W½SE¼NW¼SE¼	5.00
W½NW¼SW¼SE¼	5.00
SE¼SE¼SW¼	10.00
E½SW¼SE¼SW¼	5.00
SW¼SW¼SW¼	10.00
T. 21 S., R. 61 E., M.D.M.	
Section 30:	
NW¼SE¼NE¼NE¼	2.50
W½NW¼NE¼NE¼	5.00
SE¼NE¼SW¼NE¼	2.50
SE¼NW¼SW¼NE¼	2.50
NW¼SE¼NW¼NE¼	2.50
N½SE¼SE¼NW¼	5.00
NW¼SE¼SE¼SE¼	2.50
SE¼SW¼SE¼SE¼	2.50
TOTAL	132.50

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